

In the Claims

Claims 1-31 (canceled).

Claim 32 (currently amended): A method of forming a particle-impregnated conductive material over a semiconductor substrate, comprising:

providing a mixture containing particles in a liquid carrier;

spreading ~~particles~~ the mixture over the semiconductor substrate, and then evaporating the liquid carrier to leave the particles dispersed over the semiconductor substrate;

forming a monolayer of conductive material over the dispersed particles; and

wherein the conductive material and particles together are at least part of the particle-impregnated conductive material.

Claim 33 (original): The method of claim 32 wherein the particles are electrically conductive.

Claims 34 and 35 (canceled).

Claim 36 (withdrawn): The method of claim 32 wherein the particles comprise carbon nanotubes.

Claim 37 (withdrawn): The method of claim 32 wherein the particles comprise photoluminescent or electroluminescent materials.

Claim 38 (withdrawn): The method of claim 32 wherein the conductive material is catalytic platinum.

Claim 39 (original): The method of claim 32 wherein the particles comprise tungsten.

Claim 40 (original): The method of claim 39 wherein the monolayer comprises tungsten.

Claim 41 (original): The method of claim 40 wherein the particle-impregnated conductive material comprises tungsten silicide.

Claim 42 (original): The method of claim 39 wherein the monolayer comprises tantalum.

Claim 43 (original): The method of claim 42 wherein the particle-impregnated conductive material comprises tantalum nitride.

Claim 44 (original): The method of claim 32 wherein the particles have an average maximum dimension of from about 100Å to about 10,000Å.

Claim 45 (original): The method of claim 32 wherein the monolayer comprises tungsten.

Claim 46 (currently amended): The method of claim 32 wherein the monolayer comprises tungsten, wherein the particle-impregnated conductive material comprises tungsten silicide, and further comprising exposing ~~the~~ at least some of tungsten of the monolayer to silane to incorporate at least some of the tungsten into the tungsten silicide.

Claim 47 (original): The method of claim 46 wherein the monolayer is formed from WF_6 .

Claim 48 (original): The method of claim 32 wherein the monolayer comprises tantalum.

Claim 49 (withdrawn): The method of claim 32 wherein the monolayer comprises tantalum, wherein the particle-impregnated conductive material comprises tantalum nitride, and further comprising exposing at least some of the tantalum of the monolayer to NH_3 to incorporate at least some of the tantalum into the tantalum nitride.

Claim 50 (withdrawn): The method of claim 49 wherein the monolayer is formed from TaF_5 .

Claims 51-60 (canceled).